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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/826,719	04/16/2004	Thomas P. Bishop	VIEO1220	2183
34456	7590	11/17/2005		
TOLER & LARSON & ABEL L.L.P. 5000 PLAZA ON THE LAKE STE 265 AUSTIN, TX 78746			EXAMINER CHO, HONG SOL	
			ART UNIT 2662	PAPER NUMBER

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

**Office Action Summary**

Application No.

10/826,719

Applicant(s)

BISHOP ET AL.

Examiner

Hong Cho

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10, 13-24 and 27 is/are rejected.
- 7) ☒ Claim(s) 11, 12, 25 and 26 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>04162004, 02112005, 07292005, 10292005</u> | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(e) that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 14 and 15 are rejected under 35 U.S.C. 102(e) as being anticipated by Xu et al (U.S 6885638), hereinafter referred to as Xu.

Re claims 1, 14 and 15, Xu discloses assigning packet classification data to each of the plurality of wireless communication packets (*classifying a communication in an application infrastructure by receiving a communication including a packet from the application infrastructure*, column 4, lines 25-30). Xu discloses assigning a different class of priority to the plurality of communication packets (*prioritizing the communication based on the examination*, column 4, lines 30-36).

*Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-10 and 16-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu in view of Stanton et al (U.S 6717951), hereinafter referred to as Stanton.

Re claims 2 and 16, Xu discloses all of the limitations of the base claim, but fails to disclose prioritizing a packet based on a protocol, a source address, a destination address, a source port, a destination port, or any combination thereof. Stanton discloses prioritizing a packet based on source address, destination address, receive port (column 2, lines 14-19). It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Xu to implement packet prioritization scheme of Stanton to provide more efficient use of network bandwidth by expediting packets having a higher priority ahead of packets with lower priority (column 1, lines 13-18).

Re claims 3 and 17, Xu discloses classifying a packet into a different class (*associating the packet with one of a set of application specific flows while prioritizing the packet*, column 4, lines 27-30).

Re claims 4, 5, 18 and 19, Xu discloses a table showing associating the packet with different traffic types based on packet classification data in packet (*associating the packet is accomplished using a stream label mapping table, wherein an entry in the stream label matching table maps the packet to an application specific flow including types of traffic*, figure 5; column 8, lines 3-10).

Re claims 6, 7, 20 and 21, Xu discloses determining the drop precedence data once the packet classification has been determined (*determining an action based on the application specific flow associated with the packet, wherein the action includes at least one of drop, meter, and inject*, figure 5; column 8, lines 3-10).

Re claims 8-10 and 22-24, Xu discloses assigning different drop precedence priorities in each traffic type (*assigning an application weighted random discard value based on a stream rate*, column 9, lines 60-62) based on the drop precedence data and dropping selectively packets belonging to different drop precedence by using weighted random early detect process (*assigning an application weighted random discard value to the packet, based on the application specific flow associated with the packet and discarding the packet based on the application weighted random early discard value*, figure 6; column 9, lines 60-67).

Claims 13 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Xu in view of Stanton and further in view of Falco et al (U.S), hereinafter referred to as Falco.

Re claims 13 and 27, Xu discloses all of the limitations of the base claim, but fails to teach assigning latency and a priority to the packet based on the application specific flow, and forwarding the packet to a local component based on the latency and the priority. Falco discloses defining the priority and waiting-time limit for each data message (column 5, lines 22-25). It would have been obvious to one having ordinary skill in the art at the time the invention was made to implement the teaching of Falco in assigning latency and a priority to the packet based on the application specific flow into Xu so that all of the data messages within a same traffic type/class would be serviced at the same level of transmission speed.

*Allowable Subject Matter*

5. Claims 11, 12, 25 and 26 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement for reasons for allowance.

6. Claims 11 and 25 are allowable over the prior art of record since the cited references taken individually or in combination fail to particularly teach or fairly suggest assigning the application weighted random early discard value based on contention level for a port and a control value associated with the application stream.

*Conclusion*

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US Patent (6831893) to Ben Nun et al
- US Patent (6469983) to Narayana et al


8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hong Cho whose telephone number is 571-272-3087.

The examiner can normally be reached on Mon-Fri during 7 am to 4 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 571-272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3088.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

hc  
Hong Cho  
Patent Examiner  
11/8/2005

  
JOHN PEZZLO  
PRIMARY EXAMINER